

REMARKS

This amendment is responsive to the Office Action of February 15, 2005. Claims 1-75 are pending in the application and claims 55-72 have been withdrawn from consideration.

Claims 1-54 and 73-76 were rejected under 35 U.S.C. Section 102(e) as being anticipated by Pasadyn et al, U.S. Patent No. 6,588,007. This rejection is respectfully traversed on the ground that Pasadyn does not disclose all elements of each of the claims.

A primary focus of Pasadyn can be gleaned from Figure 4 and its corresponding text in the specification (which is the main portion of Pasadyn cited by the Examiner as relating to claim 1 of the present application). Specifically, a focus as indicated therein is “for at least one station, e.g., a carrier 110, to match the process endpoint for the at least one station ... ‘Matching’ the process endpoint, in this context, means that the station reaches the endpoint at the same time as the other stations.” [Col. 7, lines 59-63] (emphasis added) “The method [] begins by collecting a set of processing rate data from a multi-station processing tool, [where] [t]he set includes process rate data from each station in the processing tool, ...” [Col. 7, lines 45-49] (emphasis added) Thus, Pasadyn determines the rate of the polishing for each station in the tool, and then adjusts parameters, “e.g., downforce,” [Col. 7, line 59] affecting that rate so that the endpoint is reached by the various stations of the tool at the same time.

In general, claim 1 of the present invention recites “controlling one or more wafer properties.” It is submitted that this differs from Pasadyn, whose concern is with matching process endpoints rather than controlling wafer properties. Thus, regarding claim 1 more specifically, claim 1 recites that at least one or more wafer properties “comprises within-wafer uniformity” (a limitation added to claim 1 by the previous amendment, per agreement between the Examiner and the undersigned during the interview of November 10, 2004). It is submitted that Pasadyn neither discloses nor suggests this limitation. In addition, Pasadyn does not

disclose or suggest e.g., collecting data relating to within-wafer uniformity (as implicitly recited by element (3) of claim 1 in view of the limitation that at least one wafer property comprises “within-wafer uniformity”) or controlling within-wafer uniformity (as similarly implicitly recited by the preamble of claim 1). Consequently, for at least these reasons, it is submitted that claim 1 is allowable over Pasadyn. In addition, independent claims 12, 19, 30, 37, 48 and 73 all contain the same or similar limitations, and are thus all believed to be allowable over the art of record, as are those dependent claims depending from all aforementioned independent claims. Reconsideration of these claims is respectfully requested.

Other claims also contain additional features not found in Pasadyn, and are believed allowable for reasons due to at least those additional features. For example, Claim 2 recites that the “one or more wafer properties comprises wafer thickness.” Per, for example, element (3) of claim 1, Pasadyn does not disclose collecting data relating to wafer thickness. Pasadyn is only concerned with matching the endpoint of various stations on a tool, and thus does not disclose or suggest that one of the properties at issue would be “thickness.” (With regard, for example, to detecting the “endpoint,” Pasadyn indicates that CMP tools use “optical reflection, thermal detection, and/or friction-based techniques to detect the endpoint,” i.e., thickness measurements are not used. [Col. 1, lines 44-46]). In addition, dependent claims 20 and 38 also contain the aforementioned features of claim 2, and these claims are also believed allowable for at least the same reasons as claim 2.

As another example, claim 5 recites “integrating said data collected from said inline sensor with said data collected from said in situ sensor before processing said subsequent wafer.” It is submitted that this is not disclosed or suggested by Pasadyn. The examiner appeared to indicate that this limitation is implied by virtue of a run-to-run process taking place. However, Applicants submit that the existence of a run-to-run process does not necessitate such integration

of data from these two types of sensors. Consequently, reconsideration of claim 5 is respectfully requested. In addition, dependent claims 16, 41, 51 and 76 also contain the features mentioned above. Consequently, for at least the aforementioned reasons, these dependent claims are believed allowable over the art of record.

Conclusion

Applicants respectfully submit that, as described above, the cited prior art does not show or suggest the combination of features recited in the claims. Applicants do not concede that the cited prior art shows any of the elements recited in the claims. However, Applicants have provided specific examples of elements in the claims that are clearly not present in the cited prior art.

For all the reasons advanced above, reconsideration of the pending claims and issuance of a Notice of Allowance is respectfully requested.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this amendment, such extension is hereby requested. If there are any fees due under 37 C.F.R. §§1.16 or 1.17 which are not enclosed, including any fees required for an extension of time, please charge those fees to our Deposit Account No. 08-0219.

Respectfully submitted,

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